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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

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Juergen SEEKIRCHER, Thomas WOHLGEMUTH

Appln. No.: 10/807,721

Filed: March 24, 2004

For: PROCESS FOR DEPICTING VARIOUS IMAGE DATA  
ON A VEHICLE DISPLAY

Attorney Docket No. 3926.079

Customer ID 000041288

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §1.97 and §1.98

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the following documents for the above-identified application. Copies of the documents set forth below and listed on the attached Form PTO-1449, copy of an Office Action which issued in the corresponding German patent application and a copy of the European Search Report in which documents were cited, are provided herewith.

1. German Patent Application No. 199 41 957 A1
2. German Patent Application No. 696 13 653 T
3. European Patent Application No. 0 771 686 A

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4. U.S. Patent No. 5 757 268 A
5. European Patent Application No. 1 080 976 A
6. U.S. Patent No. 5 121 112 A
7. Patent abstracts of Japan No. 11 120 491 A
8. Japanese Patent Application No. 2002048565 A
9. Japanese Patent Application No. 2002002425 A
10. Japanese Patent Application No. 2001071790 A
11. European Patent Application No. 1 083 076 A

**Document 1 and Document 5 (same patent family)**

German Patent Application No. 199 41 957 A1 entitled "Method and device to display alarm messages and action requests" published on March 29, 2001. This reference was cited in an Office Action in the corresponding German patent application.

European Patent Application No. 1 080 976 A entitled "Method and device to display alarm messages and action requests" published on March 7, 2001. In the European Search Report column 3, line 19 - column 5 line 40 and figures 1-10 were cited as "X" category relevancy to claims 1-8.

Applicants are not aware of any English language documents equivalent to Documents 1 and 5. An English language abstract (EP1080976 A) is provided below:

The method involves dividing a multifunction display unit (1) for displaying individually selectable menus into main and auxiliary areas (2,3), whereby detected critical internal system states, external ambient conditions or required interactions are automatically at least partially displayed first in the main

area, whereby warning and interaction requests are displayed either temporarily or until the interactions are complete or the critical state is relieved or the warning acknowledged. The acknowledged warning message etc. is then shown in the auxiliary area. An Independent claim is also included for an arrangement for displaying warning messages and interaction requests.

**Document 2 and Document 3 (same patent family)**

German Patent Application No. 696 13 653 T entitled "Information display apparatus for vehicles" published on May 8, 2002. This reference was cited in an Office Action in the corresponding German patent application.

European Patent Application No. 0 771 686 A entitled "Information display apparatus for vehicles" published on May 7, 1997. In the European Search Report column 4, line 10 - column 10 line 28, abstract and figures 1-19 were cited as "X" category relevancy to claims 1-8.

Document 3 is in the English language.

**Document 4**

US Patent No. 5 757 268 A entitled "Prioritization of vehicle display features" published on May 26, 1998.

In the European Search Report column 4, line 22 - column 5 line 25; column 6, line 4 - column 7 line 58; column 8, line 36 - column 9 line 14; abstract; claim 1 and figures 1,3,4,6-8 were cited as "X" category relevancy to claims 1-8.

Document 4 is in the English language.

**Document 6**

US Patent No. 5 121 112 A entitled "Display apparatus for vehicle" published on June 9, 1992.

In the European Search Report column 2, line 49 - column 3 line 25; column 4, line 52 - column 5 line 7; abstract and figures 1,4 were cited as "X" category relevancy to claims 1-5,7.

Document 6 is in the English language.

**Document 7**

Patent abstracts of Japan No. 11 120 491 A entitled "INFORMATION DISPLAY DEVICE" published on April 30, 1999.

In the European Search Report abstract was cited as "A" category relevancy to claims 1-8.

Document 7 is in the English language.

**Document 8**

Japanese Patent Application No. 2002048565 A entitled "DISPLAY DEVICE FOR VEHICLE" published on February 15, 2002.

As disclosed in the present specification, Document 8 describes a control unit for a display in a vehicle. The control unit includes a control means, via which a 3D-map can be represented on a display for navigation purposes. The 3D-map can, in a superimposing mode, additionally have superimposed an infrared image acquired with an infrared camera, which shows obstacles ahead of the vehicle. The control unit manages the positioning of the infrared image on the display in a superimposition or overlay mode. The arrangement on the display

occurs, for example, in the case that the partial image area or screen area which includes the infrared image encompasses 50% or more of the total surface of the 3D-map. In the case that extremely poor visibility conditions exist, and no direct visual verification can be carried out by the vehicle operator, then only the 3D-map as well as route or direction symbols for the trip route are depicted.

Applicants are not aware of any English language document equivalent to Documents 8, other than an English language abstract:

To provide a display device for vehicle allowing a driver to easily recognize a forward obstacle in a traveling environment with poor visual confirmability and a map image for navigation. SOLUTION: A display control device performs a control (S16) of displaying the three-dimensional map image for navigation and the infrared image taken by use of an infrared camera in a superposed display mode, and regulates the display by the superposed display mode, when the ratio of a partial image area corresponding to the obstacle present forward included in the infrared image to the whole area of the map image is, for example, 50% or more during the control S16, except the traveling environment with extremely poor visual confirmability to display only the map image and a course guidance arrow for guiding a route (S14, S15 and S17).

#### Document 9

Japanese Patent Application No. 2002002425 A entitled "DISPLAY DEVICE FOR VEHICLE" published on January 9, 2002.

As disclosed in the present specification, Document 9 describes a control unit for a display in a vehicle. The control unit includes a control means, via which a 3D-map can be represented on a display for navigation purposes. The 3D-map can, in a superimposing mode, additionally have superimposed an infrared image acquired with an infrared camera, which shows obstacles ahead of the vehicle. The control unit manages the positioning of the infrared image on the display in a superimposition or overlay mode. The arrangement on the display occurs, for example, in the case that the partial image area or screen area which includes the infrared image encompasses 50% or more of the total surface of the 3D-map. In the case that extremely poor visibility conditions exist, and no direct visual verification can be carried out by the vehicle operator, then only the 3D-map as well as route or direction symbols for the trip route are depicted.

Applicants are not aware of any English language document equivalent to Documents 9, other than an English language abstract:

To allow a driver to easily recognize an obstacle existing in the front in a traveling environment with bad visibility. SOLUTION: A display control device extracts a partial image corresponding to the obstacle from an infrared image photographed by an infrared ray camera based on a detection result of the obstacle by a front obstacle sensor and information on an arrangement relation on a vehicle of the infrared ray camera set in advance and the front obstacle sensor and displays the

extracted partial image on a display device in a state that the extracted partial image is overlapped with a corresponding position of a three-dimensional map image in front of a present position generated based on map image information, because front visibility is not good when a light switch is turned on.

**Document 10**

Japanese Patent Application No. 2001071790 A entitled "VEHICULAR DISPLAY DEVICE" published on March 21, 2001.

As disclosed in the present specification, Document 10 describes a display for a motor vehicle. The display can selectively be operated in an automatic mode or manually. In the automatic mode, in the case of simultaneous activated zoom functionality, an enlarged image segment or screen segment of an obstacle, which is in the environment of the vehicle, is depicted upon the display. Therein the complete full scene image can be represented in miniature within the enlarged image segment which shows the obstacle. The image segment which includes the obstacle is presented enlarged particularly in the case that the distance between the own vehicle and a detected obstacle is greater than a corresponding preset threshold value. The threshold value of the described distance criteria serves herein for prioritizing the system information, wherein herein the threshold value is adapted to the speed of the motor vehicle. Therewith a display is prepared for the vehicle, which makes it possible to recognize a distant obstacle ahead of the vehicle and to display this. In the video display, that obstacle in

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particular is depicted which is closest to the own vehicle and with which at the same time satisfies the threshold condition, that is, which exhibits the highest priority. The disadvantage herein with the prioritization with respect to the image data to be displayed is that only the system information provided by the camera system is taken into consideration.

Document 11 is submitted herewith as an English language document in the patent family of Document 10.

The present Information Disclosure Statement is being filed after three months from the application's filing date but before the mailing date of the first Office Action on the merits, therefore no Certification Under 37 C.F.R. §1.97(e) or fee under 37 C.F.R. §1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedated or otherwise remove any listed document as a competent reference against the claims of the present application.

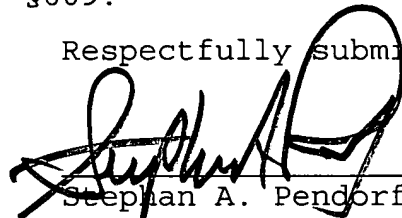


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Applicant respectfully requests that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Respectfully submitted,

  
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Stephan A. Pendorf  
Reg. No. 32, 665

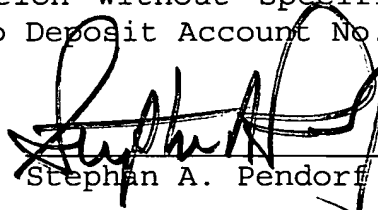
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Dated: July 23, 2004

**CERTIFICATE OF MAILING AND AUTHORIZATION TO CHARGE**

I hereby certify that the foregoing INFORMATION DISCLOSURE STATEMENT Form PTO-1449, including thirteen (13) documents, for U.S. Application No. 10/807,721 filed March 24, 2004, were deposited in first class U.S. mail, postage prepaid, P.O. Box 1450, Alexandria, VA 22313-1450, on July 23, 2004.

The Commissioner is hereby authorized to charge any additional fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account No. 16-0877.

  
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Stephan A. Pendorf

Substitute for form 1449/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	10/807,721
		Filing Date	03/24/2004
		First Named Inventor	Helmuth Eggers
		Art Unit	2612
		Examiner Name	
Sheet	of	Attorney Docket No.	3926.079

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-5 757 268 A	05/26/1998	Daniel Toffolo et al.	c. 4, line 22--c. 5, line 25; c. 6, line 4--c. 7, line 58; c. 8, line 36--c. 9, line 14; abstract, figures 1,3,4,6-8; claim 1
		US-5 121 112 A	06/09/1992	Hiroshi Nakadozono	c. 2, line 49--c. 3, line 25; c. 4, line 52--c. 5, line 7; abstract, figures 1, 4
		US-			
		US-			
		US-			
		US-			
		US-			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>3</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		DE 199 41 957 A1	03/29/2001	Eckhard Liebig et al.		
		DE 696 13 653 T	05/08/2002	Akihiko Nojima et al.		
		EP 0 771 686 A	05/07/1997	Akihiko Nojima et al.	c. 4, line 10--c. 10, line 28; abstract, figures 1-19	
		EP 1 080 976 A	03/07/2001	Eckhard Liebig et al.	c. 3, line 19--c. 5, line 40; figures 1-10	
		JP 11 120 491 A (abstract)	04/30/1999	Toyoda Kotaro	abstract	
		JP 2002048565 A	02/15/2002	Isomoto Kazunori et al.		
		JP 2002002425 A	01/09/2002	Isomoto Kazunori et al.		
		JP 2001071790 A	03/21/2001	Kojima Koichi et al.		
		EP 1 083 076 A	03/14/2001	Hiroki Uemura et al.		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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